Before the

Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Part 22 of the Commission's	)	WT Docket No. 03-103
Rules To Benefit the Consumers of Air-	)	
Ground Telecommunications Services	)	
	)	
Biennial Regulatory Review—Amendment of	)	
Parts 1, 22, and 90 of the Commission's Rules	)	

Reply Comments of Able Communications

David Thomy, pres

Able Communications
P.O. Box 24540
Jacksonville, Fl 32241
(904)737-5000

Able Communications Ltd. is a license holder in the (AGRAS) air to ground service.

It would be considered under the rules as a small business.

Able Communications would like to respond to the comments of several commanders in the FCC Docket No. 03-103.

Able's concern is for the discussion of consumer equipment on aircraft and the use of field-testing as one of several methods of pass failing the use of consumer equipment on aircraft by other organizations other than the FCC.

The alternate organizations, be it the FAA or an industry group, could not use the FCC type acceptance of equipment as a basis of non-interfering emissions in an aircraft environment.

The reason is the FCC does not check the actual production piece and does not verify any equipment in the market to assure continuing production as proposed to meet emission requirements.

Second is the testing procedure itself. In particular I am looking at the 2.4 and 5 Gzh equipment. Radios are approved with particular antennas and coaxial cable lengths attached. The aftermarket amplifiers (if approved at all) are tested with the 2.4 or 5 Ghz frequencies injected to look for spurious emissions with an on channel signal injected. The problem with all of this is there are no real filters either on the output of the radio or input or output of the amplifiers. When married together the broadband amplifier increases the power of spurious emissions in other bands produced by the radio or entering the radio through the data or power cabling and amplifies them and transmits them into the environment.

There is a mixing of different antennas, coaxial cable, amplifiers and other equipment different from the configurations that they were approved of by the FCC type acceptance process by consumers.

Also when the wireless radio cards are added to laptops there is the issues of amplification of the EMF produced in the processors and clocking chips in the laptop or RF picked up by the laptop acting as a receiver and transmitting it out again into the closed container of the aircraft to be continually regenerated by other laptops with no predictability of what frequencies will be transmitted and at what power level.

Thus you cannot produce potential flight cabin environments with field trials. There is new equipment continually being introduced with combinations of configurations constructed by manufacturers and modified by the consumers themselves. Thus no amount of field testing can guarantee that all combinations of equipment was

experienced in the tests much less the total combinations of a cabin full of different consumer equipment mixing and regenerating unpredictable RF emissions.

Also there are computer cards for laptops to become an advanced transmitter and/or receiver on multiple bands. It is a great temptation to work amateur stations all over the country from 40 thousand feet. Would there be requirements for scanning all spectrum in the aircraft in case of a defective equipment or intentional transmitting?

There are comments about allowing providers to chose Common Carriers status or not.
The providers customers would have no way of knowing they were not Common Carriers and even the interconnecting telecommunication companies would not know. The differences in liabilities, privacy, and tariff treatment should require the provider to inform their customers and providers of services that they are not a Common Carrier. As pointed out the medical privacy act to name just one example would be a requirement that their customers may violate if they do not understand the status of the service.

To drop Common Carrier requirements and no geographic coverage regulations the commission may allow an airline to use the spectrum intended to serve all of the public and country to be configured only to give an advantage to their geographic flight routs. There is also the issue of cross subsidy in pricing much less the issue of the air carriers acting as a bottle neck for any provider to overcome to have equipment installed on their aircraft with the accompanying liabilities and safety issues the decision maker of the Commercial Airline services is the Airlines themselves. This is because they are the decision maker that must allow any company to put equipment on the planes to serve their customers. Without the non-discrimination requirements and universal service provisions of common carriage an airline may limit and control a private provider into giving their company preferences and service that they will not offer to other air carriers.

When there is talk of using existing Cellular and PCS handsets in the comments they are really talking about the airliner becoming a small cellular system. When discuss of controlling power and other features of the phone there are questions that arise in addition to the safety and interference issues. Are the cellular and PCS customers at this point still acting under the Cellular and or PCS Company of which they are a contracted subscriber. Does their contract with their provider address this use? Since the handsets are dare I say subsidized, by these carriers is there a fee due to them?

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Does the entity controlling the handsets have to be a licensed Cellular provider? If they are not would there be issues of national security or patches in the base station systems that could cause problems if not held in the aircraft base station.

Would the aggregator controlling the systems on the aircraft have to meet the CALEA Regulations? Can anyone use this technique and aggregate the traffic to any other frequencies or satellites without being an airground provider?

Respectfully submitted,
David Thomy
Able Communications
Box 24540
Jacksonville Fl 32241